MITSUBISHI MOTORS
TECHNICAL INFORMATION

TECHNICAL SERVICE BULLETIN

SUBJECT :	No:	TSB–03–13–003
PCM REPROGRAMMING FOR DTC P0133 AND P0154	DATE:	**February, 2003**
	MODEL:	**2001–02 Diamante**

CIRCULATE TO:	[ ] GENERAL MANAGER	[X] PARTS MANAGER	[X] TECHNICIAN
[X] SERVICE ADVISOR	[X] SERVICE MANAGER	[X] WARRANTY PROCESSOR	[ ] SALES MANAGER

PURPOSE

Incorrect PCM software parameters may cause the MIL (“SERVICE ENGINE SOON” light) to come on and Diagnostic Trouble Code P0133 or P0154 to set. To eliminate this condition, reprogram the PCM as described in this bulletin.

AFFECTED VEHICLES

2001–02 Diamante

PROCEDURE

⚠ CAUTION

BATTERY VOLTAGE (AS MEASURED AT THE BATTERY POSTS WITHOUT ELECTRICAL LOAD) MUST BE 12.4V OR HIGHER IN ORDER TO REPROGRAM THE PCM.

1. Check the underside of the hood to verify that there is no label to indicate that this TSB reprogramming has already been done.

2. Using the MUT–II scan tool, check to see if any DTCs are set in the PCM. If any DTC is set, follow the appropriate DTC troubleshooting and repair instructions in the service manual.

3. Use the MUT–II to read the ECU part number as described below, **then refer to Attachment A to determine the appropriate ROM pack database number.**

   a. With the MUT–II connected, turn the ignition key to ON.

   b. At the MAIN MENU, select “1. System Select” and press **Yes**.

   c. Select “MFI” and press **Yes**.

   d. Select “Mitsubishi MFI” and press **Yes**.

   e. At the OBD–II check code screen, press **Yes**.

   f. At the Readiness Tests status screen, press **Yes**.

   g. At the MFI Main Menu screen, press **S**.

   h. At the Check Code screen, press the right arrow ▶ .

   i. The ECU part number and ROM ID will display. Note the part number and refer to the table in Attachment A of this bulletin to select the appropriate ROM pack database.

4. Disconnect the MUT–II and turn the ignition key to OFF.

FILE UNDER:
Group 13 Fuel in the Dealer Service Information Binder (2552)

5. Gather the following reprogramming equipment:

Reprogramming Cartridge **(red label)**	MB991711
256 KBYTE IC Memory Card **(red)**	MB991717
ROM Pack **(red label)**	MB991701 Use the appropriate database listed below
"Engine Compartment/Control Module" Labels	Part No. MSSF–024G–00

NOTE: Reprogramming cartridges memory cards,and ROM packs are available from SPX/OTC by calling 1–888–727–6672.

IMPORTANT
Dealers must update ROM packs as needed, depending on vehicle repair requirements for PCM software updates.
For instructions on updating ROM packs using MEDIC, and for current database information:
1) From the MEDIC Main Menu, select "MUT–II ROM Pack Re–write."
2) Select "ROM Pack Information."

For assistance with updating ROM packs using MEDIC, contact the MEDIC Hotline at 1–800–846–7575.
When updating the ROM packs for this bulletin, use the following passwords:

Database Number	Password
RN02111	1532
RN02112	2532
RN02113	4632
RN02114	7932

6. Install the red label reprogramming cartridge to the MUT–II. Then install the 256 KBYTE red memory card and the red label ROM pack. **Use the ROM pack with the appropriate database number.**

7. Reconnect the MUT–II. Connect ***both*** the 16–pin and the 12–pin data link connectors.

8. Turn the ignition key to ON.
NOTE: If the MUT–II displays "Error No. 11," request a replacement from Standard Register at (877) 227–6115, option 1.

⚠ CAUTION

DO NOT DISTURB THE HARNESS CABLES OR CONNECTIONS. INTERRUPTION DURING THE PROGRAMMING PROCESS COULD CAUSE THE PCM TO LOSE DATA OR PREVENT FUTURE PCM REPROGRAMMING.

9. **Select "MFI / ELC A/T"**.

10. **If either of the following messages display, STOP! Do not continue with this procedure:**

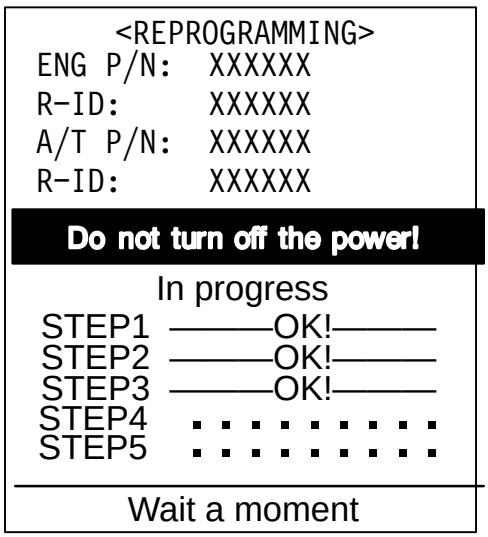
    a. If the PCM has already been reprogrammed, the MUT–II will display "This ECU has already been reprogrammed." Do not continue with this procedure.

b. If the PCM was manufactured with the latest software update, the MUT–II will display “ECU data for above part # and ROM–ID is not available.” Do not continue with this procedure.

11. If the MUT–II displays “Reprogramming is not possible on this ECU,” **first verify that the correct ROM pack is installed**.

    a. If the correct ROM pack is installed and this message displays, replace the PCM. Record this MUT–II screen information and the ROM pack database number on the repair order. **If you replace the PCM**, be sure to verify that the new PCM has the latest software. After installing the new PCM, follow the instructions in Step 3 to read the ECU part number and ROM ID. Then compare this information with the latest PCM software database information on the Diamond Dealer Link and in MEDIC. Reprogram the new PCM if necessary.

12. If the PCM can be reprogrammed, the MUT–II will display, “Do you want to reprogram this ECU?” Press “YES”.



13. The MUT–II will display this screen as it reprograms the PCM. **It will take approximately 15 minutes to complete.**

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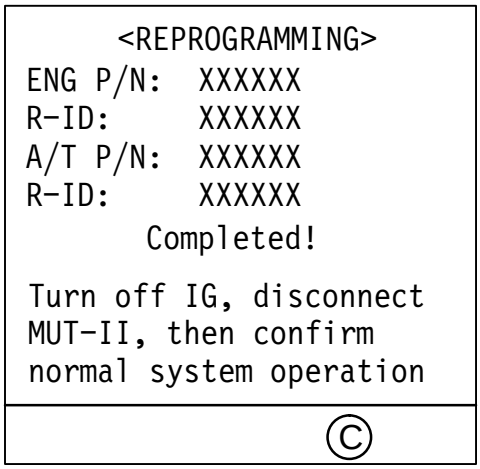


14. When the screen displays “Completed,” press “C”.

    If reprogramming does not complete, repeat this process as instructed on the MUT–II screen.

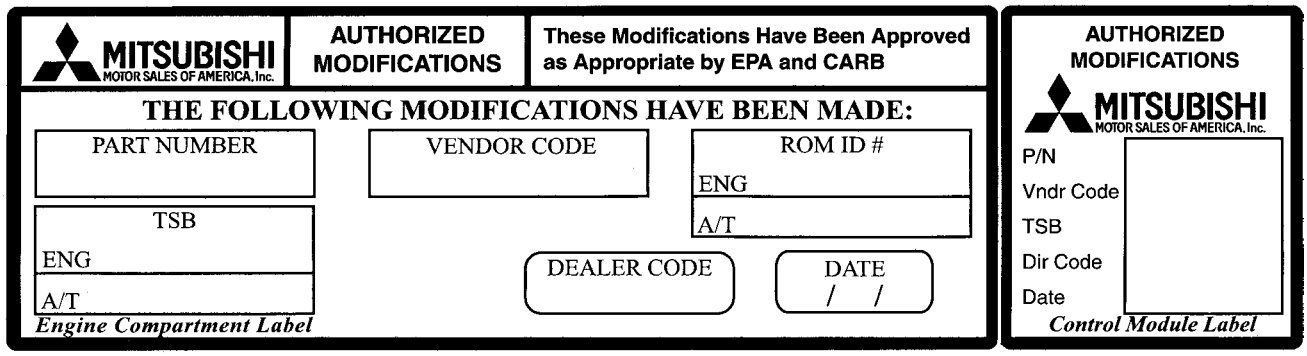
    To verify that the correct reprogramming has been made, the ROM ID number will display on the MUT–II screen. Note this number. The table in Attachment A lists the ECU part numbers, ROM ID numbers, and vendor codes that should display after reprogramming.

15. Turn the ignition key to OFF and disconnect the MUT–II. Reprogramming is complete.

    NOTE: On vehicles with TCL, the TCL light may come on during reprogramming. To reset, turn the key off for at least three minutes, then turn back to ON.

THE FOLLOWING STEPS ARE REQUIRED BY LAW:

16. Using a ball–point pen, enter the appropriate PCM part number, ROM ID#, this TSB number (TSB–03–13–003), your dealer code, and the current date on the Engine Compartment label and Control Module label (part no. MSSF–024G–00).



17. Carefully remove all dirt and oil from a vacant area near the VECI label on the underside of the hood, and affix the Engine Compartment label.

18. Affix the Control Module label to the PCM.

WARRANTY INFORMATION

PCM Reprogramming for DTC P0133

Nature Code: 99D *Cause Code:* 990

Labor Operation No. 13850115 *Time Allowance:* 0.3 hr.

Warranty Coverage: Emissions warranty 8 years/80,000 miles.

ROM Pack Update for PCM Reprogramming for DTC P0133
(Use only if necessary to update the red label ROM pack)

Labor Operation No. 138501A1 *Time Allowance:* 0.3 hr.

ATTACHMENT A

2001–2002 Diamante

			DISPLAY ON THE MUT–II SCREEN AFTER REPROGRAMMING		
ROM PACK DATABASE NUMBER	**ECU P/N TO BE UPDATED**	**MODEL**	**ECU P/N**	**ROM ID**	**VENDOR CODE**
RN02111	MR514496	2001 (without TCL)	ENG: MR514496 A/T: MR514496	ENG: 874005 A/T: 845406	E6T32371H32
RN02112	MR514497	2001 with TCL	ENG: MR514497 A/T: MR514497	ENG: 874105 A/T: 845508	E6T32372HB2
RN02113	MR578512	2002 (without TCL)	ENG: MR578512 A/T: MR578512	ENG: 803404 A/T: 865406	E6T32373H12
RN02114	MR578513	2002 with TCL	ENG: MR578513 A/T: MR578513	ENG: 803504 A/T: 865506	E6T32374HB2

ALWAYS CHECK THE CURRENT PCM SOFTWARE UPDATES LIST, WHICH CAN BE VIEWED IN MEDIC OR THE DIAMOND DEALER LINK.